XXVII	91-93	An isolated Xenopus anti-KCC antibody
XXVIII	94-100	An isolated nucleic acid molecule encoding a Xenopus KCC polypeptide

Additionally, the Patent Office has asserted that the sequences of each of SEQ ID NO: 1 through 129 are patentably distinct.

APPLICANTS' ELECTION

Applicants hereby elect the invention of Group III, 7-13, and 59, pertaining to an isolated nucleic acid encoding a KCC3 polypeptide; and also elect the sequence of SEQ ID NO: 15. As set forth below, this election is made with a traverse in part of the Restriction Requirement.

REMARKS

Claims 1-100 are now pending in the subject U.S. patent application. Claims 1-100 as filed have been subjected to a Restriction/Election Requirement.

In response to the Restriction/Election Requirement, applicants have elected the claims of Group III, claims 7-13 and 59, which are directed to an isolated nucleic acid encoding a KCC3 polypeptide. Applicants also elect the sequence of SEQ ID NO: 15.

Claim 7 has been amended to Independent form and to include the elements of claim 1. No new matter has been added. Please charge the $42.00 for an additional independent claim to Deposit Account No. **50-0426** (duplicate of this document attached).

In addition to the election presented above, applicants respectfully traverse in part the finding by the Patent Office the sequences of each SEQ ID NO: 1 through 129 are patentably distinct. The grounds for this traversal are focused on the assertion by the Patent Office that it would unduly burdensome to search all of the sequences disclosed in the subject U.S. patent application.

Applicants have elected herein above the subject matter of Group III, claims 7-13 and 59, which are directed to an isolated nucleic acid encoding a KCC3 polypeptide. Claim 7 refers to the sequence species set forth in SEQ ID NOs: 3-10 and 15-16, which pertain to a KCC3 polynucleotide or polypeptide. The odd-numbered SEQ ID NOs are nucleotide sequences encoding human and mouse KCC3 polypeptides, and the even-numbered SEQ ID NOs are human and mouse KCC3 polypeptide sequences encoded by the immediately preceding nucleotide sequence. See also Table 1 at page 31 of the subject U.S. patent application as filed.

To elaborate, disclosed and claimed are a novel, alternatively-spliced form of the human KCC3 gene (referred to herein as "hKCC3a", representative embodiments set forth in SEQ ID NOs:15-16) and novel isoforms, mouse KCC3a (representative embodiments set forth in SEQ ID NOs:7-8) and mouse KCC3b (representative embodiments set forth in SEQ ID NOs:9-10), human and mouse KCC3a lacking exon 2 (mKCC3a-2m and hKCC3a-2m, representative embodiments set forth in SEQ ID NOs:3-6). Thus, ten (10) sequences are now referenced in the elected claims by SEQ ID NO.

The KCC3 proteins also share a common predicted membrane topology with hydrophilic amino- and carboxy-terminal cytoplasmic domains flanking a central hydrophobic core of 12 highly conserved transmembrane (TM) segments. A large glycosylated extracellular loop is predicted between TM5 and TM6. The predicted cytoplasmic domains, in particular the carboxy-terminal (C-terminal) domain, contain segments of substantial homology interspersed by variable segments. The extreme C-terminus is completely identical in the KCC3 polypeptides, suggesting a crucial functional role. KCC3 is expressed in muscle, brain, lung, heart, and kidney. As shown in Figures 29A-29K of the subject U.S. patent application, KCC3b predominates in kidney, whereas KCC3a predominates in brain.

Thus, in view of the structural and functional relationships noted above and in view of the fact that now ten (10) sequences are referenced in the claims, applicants respectfully submit that the elected claims, which refer to the

sequences of SEQ ID NOs:3-10 and 15-16, can be searched without an undue burden. Applicants therefore respectfully submit that a search by the Patent Office can begin based on the election of SEQ ID NO: 15 herein, and can proceed to the additional sequences of SEQ ID NOs: 3-10 and 16. See M.P.E.P. Section 803.04.

CONCLUSIONS

Should there be any minor issues outstanding in this matter, Examiner Bunner is respectfully requested to telephone the undersigned attorney. Early passage of the subject application to issue is earnestly solicited.

Deposit Account

The Commissioner is hereby authorized to charge any deficiency or credit any overpayment associated with the filing of this correspondence to Deposit Account Number **50-0426**.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: May 27, 2003 By: Arles A. Taylor, Jr.

Arles A. Taylor, Jr.
Registration No. 39,395

Suite 1400 University Tower
3100 Tower Boulevard
Durham, North Carolina 27707
Telephone: (919) 493-8000
Facsimile: (919) 419-0383
1242/26/2 AAT/ptw

Customer No. Bar Code: